

# **OIL ANALYSIS REPORT**

# Sample Rating Trend

# **NORMAL**



# (327571) Somerset Service-Yard Horse [Somerset Service-Yard Horse] 248A11254

**Diesel Engine** 

PETRO CANADA DURON SHP 10W30 (5 GAL)

# DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the

### **Fluid Condition**

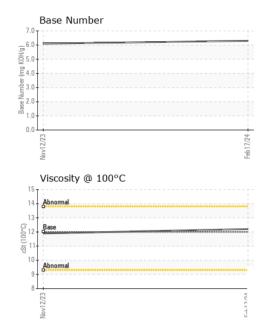
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.



Sample Number		Client Info		PCA0116531	PCA0109449	
Sample Date		Client Info		17 Feb 2024	12 Nov 2023	
Machine Age	hrs	Client Info		11699	12488	
Oil Age	hrs	Client Info		1473	1201	
Oil Changed		Client Info		Changed	Changed	
Sample Status				NORMAL	NORMAL	
CONTAMINAT	ON	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	
Water		WC Method	>0.2	NEG	NEG	
Glycol		WC Method		NEG	NEG	
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	38	37	
Chromium	ppm	ASTM D5185m	>20	2	1	
Nickel	ppm	ASTM D5185m	>4	<1	<1	
Titanium	ppm	ASTM D5185m		0	<1	
Silver	ppm	ASTM D5185m	>3	0	0	
Aluminum	ppm	ASTM D5185m	>20	6	2	
Lead	ppm	ASTM D5185m	>40	<1	0	
Copper	ppm	ASTM D5185m	>330	<1	1	
Tin	ppm	ASTM D5185m	>15	0	0	
Vanadium	ppm	ASTM D5185m		<1	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES			12 25 //			1'''
ADDITIVES		method				history2
Boron	ppm		limit/base	current 4	history1 3	nistory2 
	ppm		2		•	
Boron		ASTM D5185m	2	4	3	
Boron Barium	ppm	ASTM D5185m ASTM D5185m	2	4 0	3	
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	4 0 61	3 0 60	
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	4 0 61 <1	3 0 60	
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	4 0 61 <1 1010	3 0 60 0 861	
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050	4 0 61 <1 1010 1127	3 0 60 0 861 1024	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995	4 0 61 <1 1010 1127 1080	3 0 60 0 861 1024 933	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180	4 0 61 <1 1010 1127 1080 1309	3 0 60 0 861 1024 933 1147	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600	4 0 61 <1 1010 1127 1080 1309 2811	3 0 60 0 861 1024 933 1147 2885	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25	4 0 61 <1 1010 1127 1080 1309 2811 current	3 0 60 0 861 1024 933 1147 2885	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base	4 0 61 <1 1010 1127 1080 1309 2811 current	3 0 60 0 861 1024 933 1147 2885 history1	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base	4 0 61 <1 1010 1127 1080 1309 2811 current 5 4	3 0 60 0 861 1024 933 1147 2885 history1 6 0	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25	4 0 61 <1 1010 1127 1080 1309 2811 current 5 4	3 0 60 0 861 1024 933 1147 2885 history1 6 0 2	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25	4 0 61 <1 1010 1127 1080 1309 2811 current 5 4	3 0 60 0 861 1024 933 1147 2885 history1 6 0 2	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method  *ASTM D5185m  *ASTM D5185m  ASTM D5185m  ASTM D5185m  *ASTM D5185m  *ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25 >20	4 0 61 <1 1010 1127 1080 1309 2811 current 5 4 current	3 0 60 0 861 1024 933 1147 2885 history1 6 0 2 history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  Method  ASTM D5185m  Method  *ASTM D7844  *ASTM D7624  *ASTM D76145	2 0 50 0 950 1050 995 1180 2600 limit/base >25 >20	4 0 61 <1 1010 1127 1080 1309 2811 current 5 4 4 current 2.1 14.4	3 0 60 0 861 1024 933 1147 2885 history1 6 0 2 history1 1.7 13.4	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  Method  ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D76145	2 0 50 0 950 1050 995 1180 2600 limit/base >25 >20 limit/base >3 >20 >30 limit/base	4 0 61 <1 1010 1127 1080 1309 2811 current 5 4 4 current 2.1 14.4 27.1	3 0 60 0 861 1024 933 1147 2885 history1 6 0 2 history1 1.7 13.4 25.2	history2 history2



# **OIL ANALYSIS REPORT**



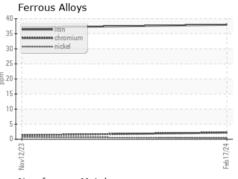
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Precipitate	scalar	*Visual	NONE	NONE	NONE	
Silt	scalar	*Visual	NONE	NONE	NONE	
Debris	scalar	*Visual	NONE	NONE	NONE	
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Appearance	scalar	*Visual	NORML	NORML	NORML	
Odor	scalar	*Visual	NORML	NORML	NORML	
<b>Emulsified Water</b>	scalar	*Visual	>0.2	NEG	NEG	
Free Water	scalar	*Visual		NEG	NEG	
FLUID PROPE	DTIES	method	limit/hase	current	history1	history2

12.2

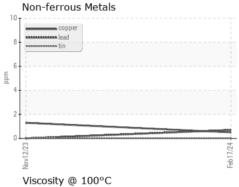
11.9

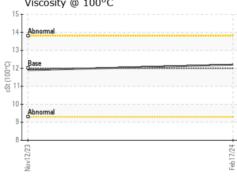
ASTM D445 12.00

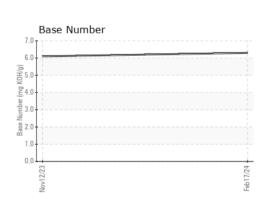
Visc @	100°C
GRA	PHS



cSt









Laboratory Sample No.

Lab Number : 06100684 Unique Number : 10898914

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PCA0116531

Received **Tested** Diagnosed

: 26 Feb 2024 : 27 Feb 2024

: 28 Feb 2024 - Sean Felton

Transervice - Shop 2480 - Somerset Service

606 E. Bourne Avenue Somerset, KY US 42501

Contact: Bart Beshears Shop2480@transervice.com

Test Package : FLEET Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) T:

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